

REMARKS

This is a full and timely response to the final Office Action of December 19, 2006.

Reexamination, reconsideration, and allowance of the application and all presently pending claims are respectfully requested.

Upon entry of this Fourth Response, claims 1, 3-9, 11-15, and 17-28 remain pending in this application. Claims 1, 3-9, 11, 12, 14, 20, 21, and 24 are directly amended herein. It is believed that the foregoing amendments add no new matter to the present application.

Response to §103 Rejections

In order for a claim to be properly rejected under 35 U.S.C. §103, the combined teachings of the prior art references must suggest all features of the claimed invention to one of ordinary skill in the art. See, e.g., *In Re Dow Chemical Co.*, 837 F.2d 469, 5 U.S.P.Q.2d 1529, 1531 (Fed. Cir. 1988), and *In re Keller*, 642 F.2d 413, 208 U.S.P.Q. 871, 881 (C.C.P.A. 1981). In addition, “(t)he PTO has the burden under section 103 to establish a *prima facie* case of obviousness. It can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988) (Citations omitted). Furthermore, the Federal Circuit has stated that “(i)t is impermissible, however, to simply engage in hindsight reconstruction of the claimed invention, using the applicant’s structure as a template and selecting elements from references to fill the gaps.” *In re Gorman*, 933 F.2d 982, 987, 18 U.S.P.Q.2d 1885 (1991). In this regard, “(o)bviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of references can be combined *only* if there is some suggestion or

incentive to do so.” *ACS Hospital Systems, Inc., v. Montefiore Hospital*, 732 F.2d 1572, 1577; 221 U.S.P.Q. 929, 933 (Fed Cir. 1984).

Claim 1

Claim 1 presently stands rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Cacerano* (U.S. Patent No. 6,308,205) in view of *Davidson* (U.S. Patent No. 5,428,748).

Claim 1, as amended, reads as follows:

1. An element management system (EMS) for managing elements of a communication network, the EMS in communication with a plurality of remote clients, comprising:

memory for storing a provision template to be used to configure a plurality of network elements of the communication network, the provision template having control values for provisioning the plurality of network *one of the control values indicative of how a user has specified a network element attribute is to be provisioned for each of the plurality of network elements, the one control value based on user input received by at least one of the remote clients*; and

a system controller configured to identify, based on user input received by at least one of the remote clients, each of the plurality of network elements and to automatically provision each of the identified network elements by updating a respective configuration of each of the identified network elements based on the one control value thereby changing the network element attribute for each of the plurality of network elements, wherein the network elements are communicatively coupled to the EMS via the communication network. (Emphasis added.)

Applicants respectfully assert that the combination of *Cacerano* and *Davidson* fails to suggest at least the features of claim 1 highlighted above. Accordingly, the 35 U.S.C. §103 rejection of pending claim 1 is improper.

In this regard, *Cacerano* appears to disclose a server that monitors a plurality of network devices. Configuration information in a database of *Cacerano* appears to indicate the configuration of network devices being monitored by the server. Further, the configuration information in the database is managed by the server, and a user may change the configuration of a particular network device or “targeted device” by submitting a request to the server. See

column 11, lines 33-63. Presumably, such a request may include a “control value” that indicates how the targeted device is to be changed, and the server may update the configuration of the targeted device based on this “control value.” However, it appears that such a user request affects only the targeted device. Moreover, it appears that, to change the same network element attribute for a different network device, a new user request directed to the different network device would be submitted.

In the present invention, as defined by claim 1, a “provision template” can be used by a “system controller” to “automatically” provision the same network element attribute for a plurality of network elements. Thus, in stark contrast to *Carcerano*, it is unnecessary for a user to submit multiple requests to update the same network element attribute for multiple network elements. Indeed, as described by claim 1, the same “network element attribute” for each of a plurality of network elements is changed based on the *same* “control value” of the “provision template.” There is no such “control value” disclosed by *Carcerano*. Thus, *Carcerano* fails to suggest at least “one control value” that is “based on user input received by at least one of the remote clients” and is “indicative of how a user has specified a network element attribute is to be provisioned *for each of the plurality of network elements*” and a “system controller configured to... automatically provision each of the identified network elements by updating a respective configuration of *each* of the identified network elements based on the one control value *thereby changing the network element attribute for each of the plurality of network elements*,” as recited by claim 1. (Emphasis added).

In addition, *Davidson* fails to remedy the deficiencies of *Carcerano*. In this regard, *Davidson* appears to disclose a computer that configures a plurality of peripheral devices. In this regard, the computer has a setup program that provides a plurality of “default configuration values” for all parameters except the peripheral I/O address and interrupt code. See column 5,

lines 59-61. Applicants observe that there is nothing in *Davidson* to indicate that any of the “default configuration values” are “based on user input received by at least one of the remote clients,” as recited by claim 1, and these “default configuration values,” for at least this reason, cannot constitute the “control values” recited in claim 1.

In addition, *Davidson* teaches that a user may change any of the “default configuration values” via user input. See column 5, lines 62-63. However, when the text from column 5, line 54, to column 6, line 17, is properly read as a whole, it is clear that such text is describing a process for configuring one peripheral device 44 (see, e.g., column 5, lines 64-66, “The configuration setup program 29 also calls a subroutine 30 for identifying an available I/O address, not used by an of the *other peripheral devices 38, 40, 42.*” Emphasis added.) Thus, it appears that column 5, lines 62-63, of *Davidson* is suggesting that default values for a particular peripheral device can be changed so that the configuration of the particular peripheral device can be tailored by the user. However, there is nothing in *Davidson* to indicate that any user input value for changing the default configuration of one peripheral device would automatically be used for any other peripheral device. Accordingly, *Davidson* fails to suggest at least “one control value” that “is based on user input received by at least one remote client” and is “indicative of how a user has specified a network element attribute is to be provisioned *for each of the plurality of network elements*” and a “system controller configured to... *automatically provision each of the identified network elements by updating a respective configuration of each of the identified network elements based on the one control value thereby changing the network element attribute for each of the plurality of network elements,*” as recited by claim 1. (Emphasis added). Therefore, *Davidson* fails to suggest the aforementioned features of claim 1 that are missing from *Carcerano*.

For at least the above reasons, Applicants respectfully assert that the combination of *Carcerano* and *Davidson* is inadequate to suggest each feature of claim 1.

In addition, in attempting to justify the alleged combination of *Carcerano* and *Davidson*, it is asserted in the Office Action that:

“Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Davidson’s ideas of automatically downloading those configuration parameter into the device with Carcerano’s system in order to provide an efficient configuration system.”

However, the relevant inquiry under 35 U.S.C. §103 is not whether an alleged combination would be an improvement to or be more “efficient” than existing systems but is rather whether the *cited art* provides a motivation or reason for making the alleged combination. In this regard, to reject a claimed invention under 35 U.S.C. §103 based on a combination of multiple references, “(t)here must be some reason, suggestion, or motivation *found in the prior art* whereby a person of ordinary skill in the field of the invention would make the combination.”

In re Oetiker, 977 F.2d 1443, 1447, 24 U.S.P.Q.2d 1443 (Fed. Cir. 1992) (emphasis added).

Moreover, Applicants submit that the proffered reason for combining *Carcerano* and *Davidson*, without any reference to an objective teaching or motivation for making such a combination, is not adequately supported by the cited art, and the combination of the select teachings of *Carcerano* with the select teachings of *Davidson* is improper for at least this reason. “Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references.” *In re Dembiczaik*, 175 F.3d 994, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999).

In fact, when the cited art is properly viewed as a whole, it becomes readily apparent that one of ordinary skill in the art would not be motivated to seek the solutions taught by *Davidson* in implementing the system taught by *Carcerano*. In this regard, *Davidson* specifically teaches

that its configuration method is to be applied to computer peripheral devices, which are coupled directly to the computer's system bus. See, e.g., Abstract and FIG. 1, which shows each peripheral device connected directly to the computer's system bus. The alleged element management system (EMS) of *Carcerano*, on the other hand, manages remote network devices of a communication network by communicating with these devices over the network. Thus, *Davidson* teaches away from *Carcerano*, as well as claim 1, which reads "wherein the network elements are communicatively coupled to the EMS via the communication network." In this regard, a reference "teaches away" from the claimed invention and should not be used to reject the claimed invention under §103 "when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *In re Gurley*, 2 F.3d 551, 31 U.S.P.Q.2d 1130, 1131 (Fed. Cir. 1994). "(P)rior art references before the tribunal must be read as a whole and consideration must be given where the reference diverge and teach away from the claimed invention." *Akzo N.V. v. U.S. International Trade Commission*, 808 F.2d 1471, 1481, 1 U.S.P.Q.2d 1291 (Fed. Cir. 1986), *cert. denied*, 482 U.S. 909. Moreover, Applicants submit that one of ordinary skill in the art, in implementing an element management system (EMS) for managing remote network devices over a communication network, as taught by *Carcerano*, would not readily seek solutions in a reference, such as *Davidson*, that is clearly directed toward the interoperation between a computer and its peripheral devices. Accordingly, when the cited art is properly considered as a whole, including the teachings that diverge and teach away from each other, it is readily apparent that the combination of *Carcerano* and *Davidson* is not based on the teachings of the cited art but is instead based on impermissible hindsight reconstruction of Applicants' invention.

For at least the above reasons, Applicants respectfully assert that the alleged combination is improper and fails to suggest each feature of pending claim 1. Therefore, the 35 U.S.C. §103 rejection of claim 1 should be withdrawn.

Claims 3-7, 18, 19, and 26

Claims 3-7 presently stand rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Cacerano* in view of *Davidson*. Further, claims 18 and 19 presently stand rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over the alleged combination of *Cacerano* and *Davidson* in view of *Ruberg* (U.S. Patent No. 6,538,668). In addition, claim 26 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over the alleged combination of *Cacerano* and *Davidson* in view of *Iijima* (U.S. Patent No. 6,223,218). Applicants submit that the pending dependent claims 3-7, 18, 19, and 26 contain all features of their respective independent claim 1. Since claim 1 should be allowed, as argued hereinabove, pending dependent claims 3-7, 18, 19, and 26 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Furthermore, these dependent claims recite patentably distinct features and/or combinations of features that make them allowable, notwithstanding the allowability of their base claim 1.

For example, in rejecting claim 26, it is asserted in the Office Action that:

“Thus, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Iijima’s ideas of automatically setting/updating configuration parameters for network services/switch with Cacerano-Davidson’s system in order to provide an efficient configuration system.”

As set forth hereinabove in the arguments for allowance of claim 1, merely alleging that a combination would result in an improvement or be more “efficient” than existing systems is

insufficient for establishing a *prima facie* case of obviousness under 35 U.S.C. §103. Indeed, where there is no apparent disadvantage present in a particular prior art reference, then generally there can be no motivation to combine the teaching of another reference with the particular prior art reference. *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349, 53 U.S.P.Q.2d 1580 (Fed. Cir. January 27, 2000). Applicants submit that Office Action fails to cite any apparent disadvantage of *Carcerano-Davidson* which would prompt the combination of select teachings of *Iijima* therewith. Thus, Applicants submit that the combination of *Iijima* with *Carcerano* and *Davidson* is improper, and the 35 U.S.C. §103 rejection of claim 26 should be withdrawn, notwithstanding the allowability of independent claim 1.

Claim 8

Claim 8 presently stands rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Carcerano* in view of *Davidson*. Claim 8, as amended, reads as follows:

8. An element management system (EMS) for managing elements of a communication network, the EMS in communication with a plurality of remote clients, comprising:
 - memory; and
 - a system controller configured to receive a provision template from at least one of the plurality of remote clients and to store the provision template in the memory, the provision template having control values that have been defined via user input for provisioning network elements of the communication network, the user input received by the at least one remote client, the provision template correlated with a plurality of network elements to which the provision template is to be applied, one of the control values specified by a user for controlling a network element attribute for each of the correlated network elements, the system controller configured to receive, from at least one of the remote clients, a request that identifies the provision template and to automatically provision, in response to the request, each of the correlated network elements based on the one control value thereby updating the network element attribute for each of the correlated network elements based on the one control value, wherein the correlated network elements are provisioned based on information transmitted by the system controller over the communication network to the correlated network elements.* (Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1, Applicants assert that the alleged combination of *Cacerano* and *Davidson* fails to suggest at least the features of claim 8 highlighted above, and such an alleged combination is improper under 35 U.S.C. §103. Accordingly, Applicants submit that the 35 U.S.C. §103 rejection of claim 8 should be withdrawn.

Claims 9, 11 and 20

Claims 9 and 11 presently stand rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Cacerano* in view of *Davidson*. In addition, claim 20 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Cacerano* in view of *Davidson* and further in view of *Lewis* (U.S. Patent No. 6,243,747). Applicants submit that the pending dependent claims 9, 11 and 20 contain all features of their respective independent claim 8. Since claim 8 should be allowed, as argued hereinabove, pending dependent claims 9, 11 and 20 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Furthermore, these dependent claims recite patentably distinct features and/or combinations of features that make them allowable, notwithstanding the allowability of their base claim 8.

Claim 12

Claim 12 presently stands rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Cacerano* in view of *Davidson*. Claim 12 presently reads as follows:

12. A method for managing elements of a communication network, comprising the steps of:
receiving a provision template from a remote client, the provision template having control values for controlling different network element attributes;
identifying, based on user input, a plurality of network elements to which the provision template is to be applied; and
automatically provisioning each of the identified network elements based on the control values, one of the control values corresponding to a particular network element attribute, the provisioning step comprising the steps of:
controlling the particular network element attribute for each of the identified network elements based on the one control value of the provision template; and
transmitting information indicative of the one control value over a network to each of the identified network elements. (Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1, Applicants assert that the alleged combination of *Cacerano* and *Davidson* fails to suggest at least the features of claim 12 highlighted above, and such an alleged combination is improper under 35 U.S.C. §103. Accordingly, Applicants submit that the 35 U.S.C. §103 rejection of claim 12 should be withdrawn.

Claims 13 and 27

Claim 13 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Cacerano* in view of *Davidson*. Further, claim 27 presently stands rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over the alleged combination of *Cacerano* and *Davidson* in view of *Iijima*. Applicants submit that the pending dependent claims 13 and 27 contain all features of their independent claim 12. Since

claim 12 should be allowed, as argued hereinabove, pending dependent claims 13 and 27 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Furthermore, these dependent claims recite patentably distinct features and/or combinations of features that make them allowable, notwithstanding the allowability of their base claim 12.

For example, for at least reasons similar to those set forth above in the arguments for allowance of claim 26, Applicants respectfully assert that the alleged combination of *Carcerano*, *Davidson*, and *Iijima* is improper. Thus, the 35 U.S.C. §103 rejection of claim 27 should be withdrawn, notwithstanding the allowability of independent claim 12.

Claim 14

Claim 14 presently stands rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Carcerano* in view of *Davidson*. Claim 14, as amended, reads as follows:

14. A method for managing elements of a communication network, comprising the steps of:
defining a first provision template based on user input, *the first provision template having control values and correlated with a plurality of network elements to which the first provision template is to be applied*, each of the control values corresponding to a respective network element attribute for each of the correlated network elements;
receiving a request, from a remote client, that identifies the first provision template; and
automatically provisioning, in response to the request, each of the correlated network elements based on each of the control values of the retrieved first provision template, the provisioning step comprising the steps of:
transmitting information indicative of the control values over the communication network to each the correlated network elements; and
configuring each of the correlated network elements based on the information. (Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1, Applicants assert that the alleged combination of *Carcerano* and *Davidson* fails to suggest at

least the features of claim 14 highlighted above, and such an alleged combination is improper under 35 U.S.C. §103. Accordingly, Applicants submit that the 35 U.S.C. §103 rejection of claim 14 should be withdrawn.

Claims 15 and 17

Claims 15 and 17 presently stand rejected in the Office Action under 35 U.S.C. §103 as allegedly being unpatentable over *Carcerano* in view of *Davidson*. Applicants submit that the pending dependent claims 15 and 17 contain all features of their respective independent claim 14. Since claim 14 should be allowed, as argued hereinabove, pending dependent claims 15 and 17 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Furthermore, these dependent claims recite patentably distinct features and/or combinations of features that make them allowable, notwithstanding the allowability of their base claim 12.

Claim 21

Claim 21 presently stands rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Carcerano* in view of *Davidson*. Claim 21, as amended, reads as follows:

21. An element management method, comprising the steps of:
receiving, at a client, a user input specifying a first control value for controlling a network element attribute;
defining a first provision template based on the first control value specified by the user;
storing the first provision template in memory remote from the client; and
provisioning, in response to a request from a client remote from the memory, a first plurality of network elements based on the first provision template stored in the memory, wherein the provisioning step comprises the steps of:
retrieving the first provision template from the memory in response to the request;

transmitting information indicative of the retrieved first provision template over a communication network to each of the first plurality of network elements; and
automatically setting, within each of the first plurality of network elements, a control value for the network element attribute based on the information such that the first control value specified by the user affects the network element attribute for each of the first plurality of network elements.
(Emphasis added).

For at least reasons similar to those set forth above in the arguments for allowance of claim 1, Applicants assert that the alleged combination of *Cacerano* and *Davidson* fails to suggest at least the features of claim 21 highlighted above, and such an alleged combination is improper under 35 U.S.C. §103. Accordingly, Applicants submit that the 35 U.S.C. §103 rejection of claim 21 should be withdrawn.

Claims 22-25 and 28

Claims 22, 24, and 25 presently stand rejected under 35 U.S.C. §103 as allegedly being unpatentable over *Cacerano* in view of *Davidson*. Further, claim 23 presently stands rejected under 35 U.S.C. §103 as allegedly being unpatentable over the alleged combination of *Cacerano* and *Davidson* in view of *Ruberg*. In addition, claim 28 presently stands rejected under 35 U.S.C. §103 as allegedly being unpatentable over the alleged combination of *Cacerano* and *Davidson* in view of *Iijima*. Applicants submit that the pending dependent claims 22-25 and 28 contain all features of their respective independent claim 21. Since claim 21 should be allowed, as argued hereinabove, pending dependent claims 22-25 and 28 should be allowed as a matter of law for at least this reason. *In re Fine*, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988). Furthermore, these dependent claims recite patentably distinct features and/or combinations of features that make them allowable, notwithstanding the allowability of their base claim 21.

For example, for at least reasons similar to those set forth above in the arguments for allowance of claim 26, Applicants respectfully assert that the alleged combination of *Carcerano*, *Davidson*, and *Iijima* is improper. Thus, the 35 U.S.C. §103 rejection of claim 28 should be withdrawn, notwithstanding the allowability of independent claim 21.

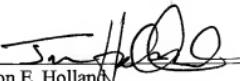
CONCLUSION

Applicants respectfully request that all outstanding objections and rejections be withdrawn and that this application and all presently pending claims be allowed to issue. If the Examiner has any questions or comments regarding Applicants' response, the Examiner is encouraged to telephone Applicants' undersigned counsel.

Respectfully submitted,

**THOMAS, KAYDEN, HORSTEMEYER
& RISLEY, L.L.P.**

By:



Jon E. Holland
Reg. No. 41,077

100 Galleria Parkway, N.W.
Suite 1750
Atlanta, Georgia 30339
(256) 704-3900 Ext. 103